

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

Design ~ Construct ~ Maintain

August 30, 2018

Mentoring Corner

Upcoming Mentoring Events:

- ⇒ Mentoring 2018-19 Program Kickoff August 30, 2018
- ⇒ Mentoring Registration Period August 30 to September 21, 2018
- ⇒ Mentoring Orientation/Speed Mentoring October 1, 2018 (10am 3:15pm)
- ⇒ Mentoring Program Kickoff October 30, 2018 (9am 4pm)

Extra Mile Mentoring Book Club – November 28, 2018 (11am – 2:30pm)

Endurance

by June Hansen, Mentoring Program Co-Coordinator

Merriam-Webster dictionary defines endurance as "the ability to withstand hardship or adversity; *especially*: the ability to sustain a prolonged stressful effort or activity." How a person endures hardships or adversity says a lot about their character and leadership ability.

The next session of Extra Mile Mentoring Book Club is going to focus on an example of leadership in extreme circumstances. The book is entitled, "Endurance: Shackleton's Incredible Voyage" by Alfred Lansing.

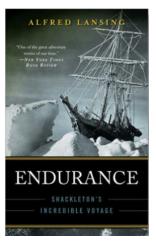
The book is the harrowing tale of British explorer Ernest Shackleton's 1914 attempt to reach the South Pole, one of the greatest adventure stories of the modern age.

In August 1914, polar explorer Ernest Shackleton boarded the Endurance and set sail for Antarctica, where he planned to cross the last uncharted continent on foot. In January 1915, after battling its way through a thousand miles of pack ice and only a day's sail short of its destination, the Endurance became locked in an island of ice. Thus, began the legendary ordeal of Shackleton and his crew of twenty-seven men.

Book club will be held in Pierre on Nov. 28, 2018, (11 a.m. – 2 p.m. CDT) and will be moderated by Mike Carlson. Book Club will meet through lunch hour so bring your lunch with you. Travel to Pierre will be required to participate in the book club. If you are at all unsure if you can travel to Pierre for the book club, please let someone else participate that can commit to that date. If you can't attend this one or are not interested in this book there will be more book clubs in the future. Books will be distributed in late September/early October.

The book club is limited to 35 people. It is open to all and you do not have to be in the mentoring program to participate. Participation is on a first-come, first-serve basis. If you're interested, discuss it with your supervisor and get approval before you sign-up. Contact Scott Eisenbeisz to sign up by email (scott.eisenbeisz@state.sd.us) or call 605-626-7874. The deadline to sign-up is Sept. 14, 2018.

Make time for Extra Mile Mentoring!



SDDOT Lighting the Way for S.D. Drivers

By John Less, Road Design

"Exciting" is not usually the first thing that comes to mind when you hear the words "roadway lighting," but a revolution is quietly underway in how we light the way for South Dakota road-users. For the past five decades, roadway lighting was the exclusive domain of the high-pressure sodium (HPS) luminaire and its familiar yellow-colored light. Technological advances in the design of light emitting diodes (LED) now mean that it is possible for manufacturers to offer energy-saving LED luminaires that meet the light output of the traditional HPS luminaires. In addition to reducing electricity consumption, LED luminaires offer the following benefits:

Greatly reduced maintenance needs, which in turn reduces the amount of time that workers have to work in traffic.

A range of available light colors, ranging from the traditional "soft" yellow to a whiter color that allows for better color recognition and is perceived by most drivers as being brighter than the traditional HPS light.

Resistance to vibration-induced failure that often occurs on luminaire poles mounted on bridges.

Configurable light distributions that reduce vertical light pollution and backlighting, reducing light pollution and any negative impact on adjacent homes.

According to Norris Leone of the Road Design Office, although the initial cost of LED luminaires is slightly more expensive, the savings in energy and maintenance results in a payback period of approximately 5 years. Once we knew that LED luminaires were capable of delivering adequate light output, the Department's Lighting on State Highways policy was revised in mid-2016 to make LED luminaires the new standard for new construction, ranging from decorative lighting to high mast tower lighting. The first project to use LED lighting was in Phillip, where 22 LED luminaires were installed along SD Highway 73.

The improvement of LED luminaires continues moving forward. The most recent project completed in Mission used the latest generation of more powerful luminaires. "Very impressed," was Winner Area Engineer Doug Sherman's reaction after driving through the project for the first time. We are sure that once drivers get to experience the new LED luminaires elsewhere in the state, they will echo Mr. Sherman's belief that, "these are definitely the way to go as we move forward into the future."



S.D.73 in Phillip (photo by Norris Leone)



U.S. 18 in Mission (photo by Norris Leone)

CPR Training Helps SDDOT Staff Save Lives

By Brenda Thomas, Training

Accidents on South Dakota roads happen frequently and at times DOT crews may be the first responders to the scene. Training our employees with the proper First Aid/CPR/AED techniques equips them to provide our stakeholders adequate care to help save a life until Emergency Medical Services arrive.

Todd Seaman, Rapid City Regional Engineer, learned from the maintenance staff that CPR training they were receiving was not adequate because it did not include hands on training. The maintenance staff wanted to practice the various techniques. Todd visited the concern with Ann Campbell, former DOT Training Coordinator, and discovered the e-learning version of First Aid/CPR/AED was the most economical. Todd Seaman recalled his conversation with Ann, "When I visited with Ann about providing hands on CPR training, she said it was hard to find and expensive. I knew we had staff that were volunteer firefighters and had conducted training. I just floated the idea of DOT staff becoming CPR trainers to our maintenance staff and most thought it would work fine and several HMW's immediately volunteered to be trainers. Ann bought into the idea and we just went from there".

South Dakota Safety Council provided the train the trainer class and DOT currently has 14 employees qualified to be First Aid/CPR/AED instructors. To date, 25 courses have been offered and 287 employees have been trained.

I asked DOT employee, Scott Witlock, First Aid/CPR/AED Instructor in Aberdeen, why he became a First Aid/CPR/AED instructor. Scott said, "I think it is very important to give all of our employees the resources and training to provide them with the knowledge of how to act in a situation. We deal with the travelling public a great deal and there is a possibility that we may be the first ones responding or come across an accident or motorist in distress. This training is not only valuable to us on the job, but in our personal lives as well".

There are many benefits to this program. Of course, there is the cost saving of not hiring instructors and fewer miles traveled to attend training which always increases productivity. Not only is cost savings a benefit, but Carol Evans, DOT Safety Coordinator, likes the relaxed atmosphere that happens when employees are training their coworkers. She said questions are more freely asked and the hands-on training is received with enthusiasm.

The classes are limited to 15 participants. The smaller class size allows better interaction between the instructor and participants. Better discussions happen with the familiarity of everyone and their job experiences.

If you are interested in becoming a Certified Instructor, please contact the DOT Training office. Certification requires completion of the two day **First Aid/CPR/AED Instructor Development Training provided through the South Dakota Safety Council**. This course is designed to train DOT staff in First Aid/CPR/AED who can commit to offering at least two trainings per year for other DOT employees.

Upcoming First Aid/CPR/AED training:

Sept. 11, Watertown - Sept. 12, Brookings - Oct. 25, Pierre Region

Log in to the LMS to register.

5 DOT Employees Hailed as Heroes



MINNEHAHA COUNTY SHERIFF'S DEPARTMENT

SIOUX FALLS LAW ENFORCEMENT CENTER 320 WEST FOURTH STREET SIOUX FALLS, SOUTH DAKOTA 57104-2413

PH: (605)-367-4300 FAX: (605)-367-7319

Secretary Darin Bergquist South Dakota Department of Transportation

08/16/2018

Re: Gary Steinhoff, Chris Peters, Adam Feistner, Jordan Doane, and Curt Theisen

Secretary Bergquist,

We know that DOT employees work hard and have a difficult job, but we wanted to inform you of some of your workers who went way above and beyond the duties expected of them.

On August 15th, 2018 at about 2:00 p.m., we received a call of a runaway from McCrossan's Boys Ranch in rural Minnehaha County. The caller remained on the phone with our dispatcher, informing them that the runaway was approaching I-90 on Marion Road. Eventually, the young man ended up on the bridge overpass on I-90, threatening to jump off. This information was relayed to Deputies and Troopers, and was overheard by Gary, Chris, Adam, Jordan, and Curt.

Curt realized that they were close to the bridge, and they arrived at the location immediately. They stopped traffic on a very busy interstate and attempted to talk to the young man. He was trying to jump off the bridge into traffic. As the young man tried to maneuver on the bridge to jump into traffic, your men were able to maintain traffic control, blocking all three lanes of traffic.

Once he realized he wasn't going to be able to jump into oncoming traffic, the young man tried to tie a piece of clothing around his neck and jump off the bridge. The makeshift noose didn't hold, and he fell amongst them. The young man then got up and tried to run into traffic to injure himself. Chris and Gary subdued him, which was no easy task as he was actively fighting to get away from them. Upon our arrival, Chris was lying on the young man, holding his arms at the same time, while others were restraining his legs. Chris received some scrapes due to these efforts.

Secretary Bergquist, it is solely due to their efforts that this subject is alive. If they hadn't been there, he would surely have been successful in his attempt to end his life. It is no exaggeration to say that Gary, Chris, Adam, Jordan, and Curt saved a young man who was in mental crisis, and kept an unwitting driver from hitting him which would have been devastating for anyone. They should be commended for their efforts, and they have our thanks.

Respectfully,

Sheriff Mike Milstead

Captain Mike Walsh



Darin Bergquist @DarinBergquist Aug 22
Today @SDGovDaugaard hosted these five @SouthDakotaDOT employees for lunch in recognition and appreciation for their heroic actions last week saving the life of a suicidal 15-year old runaway...well done Curt Theisen, Gary Steinhoff, Adam Feistner, Jordan Doane and Chris Peters!



Electric Vehicles in South Dakota?

By Rich Zacher, Custer Area Engineer

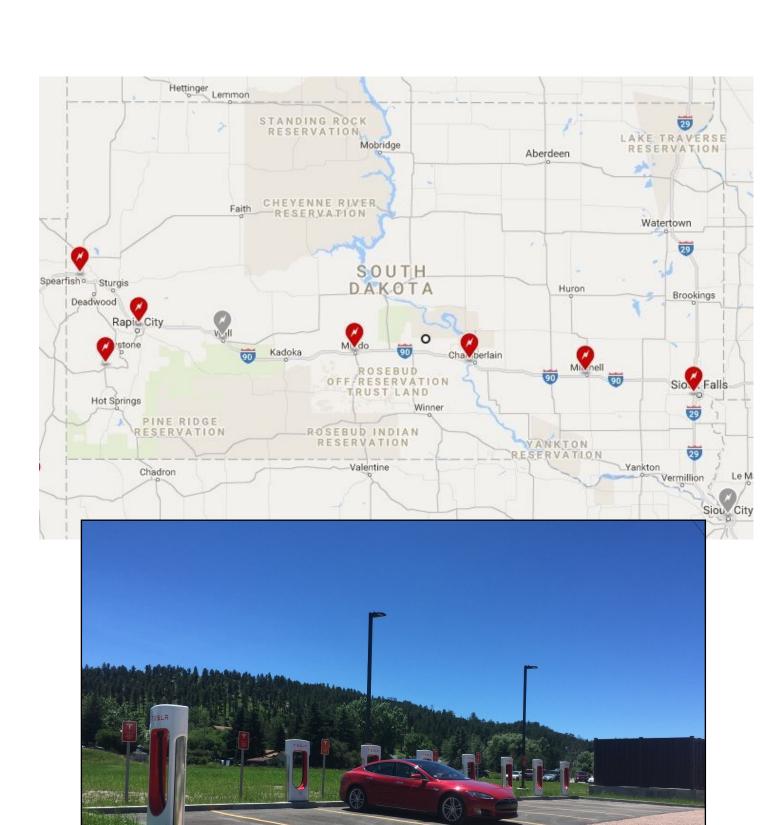
Most of us have heard at least one version of the technology driven end to the internal combustion engine. Futurists believe that by as early as 2030 all new vehicles will be electric and autonomous (self-driving), and the need for gasoline will become obsolete. If your initial thought was anything like my own, you probably allowed yourself to believe a portion of the predictions to be possible for locations far away from South Dakota. If you believe it or not, one thing that does seem to be catching on is the electric vehicle.

Less than 2% of all vehicles sold today are electric. Yet, nearly all major car manufacturers have entered the electric vehicle race. Volvo has announced that all new models will at least have electric assist capability beginning in 2019. With intense competition and the rapidly declining battery costs, the cost of owning a fully electric vehicle will soon match that of an internal combustion automobile, especially on a life cycle basis. It is predicted that while the total number of vehicles sold in the United States will remain the same, the percentage of electric vehicles will grow to over 20% by 2025.

In 1911, just three years after the Model T was introduced, Oregon became the first state to tax motor fuels. By 1932, all states and the federal government had followed suit. For years the tax worked well to fund our countries transportation system. With increased construction cost and more efficient vehicles, the fuel tax is being hit on both ends. With the increase in electric vehicles, the inflow of motor fuel tax revenue will continue to decrease.

17 states currently have some variation of an electric vehicle fee to attempt to offset the lost motor fuel tax revenue. After all, aren't the electric vehicles road users as well. There are many variations to the user fees ranging from \$50/year to \$300/year. Oregon and Vermont are experimenting with fees based on vehicle miles travelled rather than fuel consumption. South Dakota and 17 other states have not attempted to initiate a fee. The remaining states are considering or have already defeated an electric vehicle fee. Sparing you the math, with South Dakota's fuel tax and the \$2.20/\$1.00 exchange rate on the federal tax, if South Dakota ever did reach 5% electric vehicles, we would be missing out on over \$7 million in available funds. Enough to complete 30+ miles of a 24' wide mill and 2" overlay.

If you still believe this all much further in the future, consider that the city of Custer, who's last transportation innovation was to ensure that the main street was wide enough for a nineteenth century team of oxen pulling a wagon to turn completely around, is now home to a supercharger station. The Custer supercharger joins superchargers in Spearfish, Rapid City, Murdo, Chamberlain, Mitchell and Sioux Falls. Except for the Custer station, all are along the I-90 corridor, all entirely funded by Tesla, and intended to prove that long range travel in an electric vehicle is possible.



A New Era in Project Management

By Kathryn Johnson

The South Dakota Department of Transportation has long held to the principles of project management. An area of business that we have not only exceled in, but also blazed new trails in as well.

When one thinks about project management numerous thoughts probably pop into one's head, but really what is project management? Project Management is the practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals.

Here at the South Dakota Department of Transportation we recognize there is always room for growth. As an organization we want to not only be relevant in our project management practices, but we want to be revolutionary, paving the way for the future generations to come.

A crucial part to the development and delivery of any project is the foundation on which that project is built. Project Delivery, with the help of countless internal stakeholders, has been in the process of strengthening Planning & Engineering's project management philosophies. We have done this by reviewing our roles and responsibilities, regarding a project's team. We value the team mentality and want to bring it to the forefront of every project.

Our hope in doing this, is that we not only deliver an outstanding product, but also deliver it in a timely manner to receive the best possible bids. More money on the roads, means a safer and more effective public transportation system throughout the entire state. So, as we strive to grow as a team in project management, we also are redefining what it means to go the distance.

Employees: Condolences

Beverely Dorschmidt, mother of Jim Dorfschmidt, Transportation Specialist 1 in Belle Fourche, and grandmother of Matt Dorschmidt, Engineer 1, Aberdeen Design, passed away July 18, 2018, at Avera Mother Joseph Manor, Aberdeen.

Roger Monson passed away July 20, 2018 at Sandford Hospital, in Sioux Falls, SD. Roger began work with the DOT on Dec. 1, 1967 and retired on Sept. 8, 2008. He worked in Engineering at Webster until they closed the Engineering Department. He was then made HM Foreman/Supervisor at Webster until he retired.

Teresa Rupe's mother, Emadele, passed away on July 24 in Flandreau. Teresa recently retired from the office of Internal Audit.

Jason Hammrich' sister, Annette Jones from Ipswich, passed away Aug. 20, 2018, at Avera St Luke's Hospital. Jason is an Equipment Technician for Aberdeen Operations.

James Tinker, 95, passed away Aug. 11, in Pierre. Jim was an engineer with the SDDOT for 35 years, retiring in 1988.

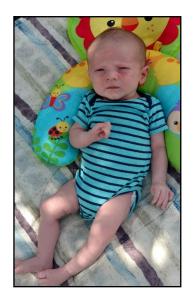
Darwin Hook, 84, father of Rocky Hook, program manager for Transportation Inventory Management, passed away Aug. 8, in Philip.

Employees: BABIES!



Whitley Ann was born on August 14, 2018 to Tim and Maddie Voegeli and weighed 7 lbs. 6 ozs.

Whitley is Tim & Maddie's 1st child & Keith's 4th grand-daughter. Keith is the HMS for Sioux Falls/Lennox shops.



Tanner Sorlie and his wife, Lexie, welcomed a baby boy, Aiden, to their family on June 21, 2018.

He weighed 7 lbs. 4 oz. and joins big sister Aubree who is $2\frac{1}{2}$ years old.

Luca Riss was born on Dec. 15, 2017 to Brandon & Christina Riss and weighed 7 lbs. 4 oz. Luca joins big brother Camden

Brandon is a Lead Engineer in the Sioux Falls.





Jason McDermott was born on Dec. 15, 2017 to Michael & Veronica McDermott weighing 6 lbs. 6 oz. and measuring 19.5 inches. He joins big sister Madelyn.

Michael is a Highway Maint. Worker for the Sioux Falls Maint, Unit.

Employees: Longevity

Kirby Kirsch 20 Sioux Falls

Charles Goldammer 35 Mitchell Area